

STANDARDS OF PERFORMANCE FOR ELECTRIC UTILITY, INDUSTRIAL-COMMERCIAL-INSTITUTIONAL, AND SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

- On February 9, 2006, the Environmental Protection Agency (EPA) promulgated a regulation that will reduce emissions of criteria air pollutants from utility, industrial, commercial, and institutional steam generating units. Criteria air pollutants are found throughout the country and include: nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO), and lead (Pb).
- Utility steam generating units are located at electric power generating stations that burn fossil fuels. Industrial, institutional, and commercial boilers are located at industrial sites, institutions, and commercial sites (e.g., college or university; office building; hospital; hotel; town, city, county, State or Federal government; etc.) which burn fossil fuels, wood, or municipal-type solid waste.
- The final rule will establish emission standards for the following three air pollutants from utility units: PM, SO₂, and NO_x. The final rule also will amend PM and SO₂ emission standards from industrial, institutional, and commercial units.
- The emission limits in the final rule are based on levels that can be achieved by installing emissions control equipment known as fabric filters for PM control, wet scrubbers for control of SO₂, and selective catalytic reduction for control of NO_x. Other emission control technologies could also be used, as long as they meet the required emission limits.
- The final rule consists of new source performance standards (NSPS) for new (built after February 28, 2005), modified, and reconstructed utility, industrial, institutional, and commercial steam generating units. Units built before February 28, 2005, will not be subject to this rule.

- While the emissions control requirements already in place through EPA’s air permitting and

air toxics programs require controls for boilers equivalent to those established by this rule, the final rule substantially tightens the existing NSPS. The existing and final utility NSPS are shown below along with the percent decrease for each pollutant.

Pollutant	Existing NSPS	Final NSPS	Percent Decrease
NO _x	1.6 lb/MWh	1.0 lb/MWh	38%
SO ₂	0.6 lb/MMBtu	1.4 lb/MWh	~75%
PM	0.03 lb/MMBtu	0.015 lb/MMBtu	50%

- For industrial, institutional, and commercial boilers, both the SO₂ and PM standards have been amended. The final PM standard is consistent with the new source limits of 0.03 lb/MMBtu included in EPA's recently issued national air toxics standards for boilers. The final standard represents a 70% reduction in the PM limit for non-utility boilers.
- A new utility, industrial, or commercial steam generating unit must demonstrate compliance with the emission standards in the NSPS upon commercial start-up. Utility units regulated by the proposed Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) will select NO_x and SO₂ controls as tight or tighter than this final rule.
- EPA estimates that 5 new utility units and 186 new industrial units will be impacted by the final rule over the next 5 years.

BACKGROUND

- The Clean Air Act requires EPA to review NSPS for utility, industrial, institutional, and commercial steam generating units that reflect the application of emissions controls known as best demonstrated technology.
- Utility NSPS were first established in 1978, and NSPS for large boilers were first established in 1984. The NO_x standards were revised for both utility and large boilers in 1997. NSPS for small boilers were established in 1989, and none of the small boiler limits have been amended to date.
- Utilities often install tighter controls than required by existing NSPS because of the existence on new source review (NSR) and cap and trade programs. The primary impact of the amended NSPS will be on units not subject to either NSR or a cap and trade program. The final rule is generally less strict than required when a unit is subject to NSR. In addition, units regulated by the proposed Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) will select NO_x and SO₂ controls as tight or tighter than those required by this

final rule.

- EPA is under a consent decree Our Children's Earth Foundation and Sierra Club to promulgate the final rule by February 9, 2006.

FOR MORE INFORMATION

- To download the final rule from EPA's web site, go to "Recent Actions" at the following address: <http://www.epa.gov/ttn/oarpg>.
- For further information about the final rule, contact Mr. Christian Fellner at EPA's Office of Air Quality Planning and Standards at 919-541-4003.
- For other combustion-related regulations, visit EPA's Combustion Related Rules page at: <http://www.epa.gov/ttn/atw/combust/list.html>.